modern casting

1982 EDITORIAL INDEX

JANUARY-DECEMBER 1982 / VOL 72

New Technology — Market Opportunities — Management in Action — Technology for Progress — Operations for Profit — Plant Tours — International Technology. In 1982 over 66 individual authors communicated their know-how to the metalcasting industry in more than 289 pages of MODERN CASTING feature articles.

Published by

American Foundrymen's Society

Golf and Wolf Roads, Des Plaines, IL 60016

AFS CMI
Dedication of H. H. Harris Laboratories Marks 25 Years Commitment to Foundry Education
Sep, p 22-24
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31

AFS EXPOSITION
AFS Congress & Castexpo '82 Preview
Apr, p 69-70
April is Foundry Month in Chicago
Mar, p 34-35
Castexpo '82 Draws 15,000 to Chicago
Jun, p 52-55
Exhibit-in-Print
Apr, p 84

AFS REGIONALS
AFS President Calls for Improving Industry Image
Apr, p 144
Bilingual Regional in Montreal
Feb, p 58
Drew Lewis is Keynote Speaker at Meeting Which Focuses on Blueprint for Survival
Jan, p 58
Extensive Regional Program Takes Look at Future and the Present
Jan, p 60
Industry Woes Can Be Solved in Part By Commitment from Top Management
Jan, p 62
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31
Southeast Chapters Celebrate 50th Annual Meeting
Apr, p 142

AIR POLLUTION CONTROL
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
Managing Hazardous Wastes in the Foundry
T. P. Kunes, W. A. Stephens, D. L. Nagle, Mar, p 40-42
A New Approach to Cupola Baghouse Design
Robert "Scotty" Clement, D. E. "Doc" Shaw, Nov, p 36-38

ALLOY CASTINGS
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Fred O. Traenkner, Nov, p 34-35

ALUMINUM BASE ALLOYS
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
Biasil Lowers Cost, Improves Quality for Fort Worth Foundry
Jun, p 83
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47
From Japan: A High Efficiency Aluminum Melting Furnace
T. Veale, Apr, p 62-63
High-Frequency, High-Energy System for Casting Core Removal
R. M. Leliaert, R. Riordan, Jan, p 38-39
Melting with a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
The Status of Critical Foundry Materials—1982
May, p 48-52
Study Projects Casting Growth Through 1995
Jan, p 32-37
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45

ANALYSIS
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33

ANNEALING
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
Improve Annealing Practice by Controlling Composition
Jun, p 61

ARC FURNACES
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
Understanding the AOD Process
Apr, p 68

ART CASTING
Art Joins Industry at a Deere Foundry
Robert S. Lee, Mar, p 47-49

AUTOMATION
Automating Britain's Foundries
Eric Ford, Jun, p 46-48
Computer Aided Design of Castings
J. A. Blevins, Jun, p 37-39
A Computer Program for Determining Sieve Distribution Analysis
Jul, p 45
Computerizing Your Foundry: Conducting the Needs Analysis
Eric Forsman, Mar, p 38-39
Computerizing Your Foundry: Your Needs Come First
Louis F. DeSilvio, Mar, p 36-37
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33
Sand Control and Cupola Efficiency Programs Aid Foundries
Jun, p 61A
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36

AUTOMOTIVE
Car, Truck Sales Rise Anticipated
V. J. Adduci, Jan, p 34
Cast Irons for Future Diesel Engines
Justin R. Drake, May, p 46-47
Survey Reflects Continued Trend Toward Downsized Cars
Jan, p 34A
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45

BUYING
Computerizing Your Foundry: How Specialty Cast Metals Did It
Dave Ferguson, Michael A. Notte, Apr, p 55-57
Computerizing Your Foundry: What a Computer Can Mean to Your Foundry
L. Wayne Kramme, Apr, p 54-55

CASE HISTORIES
Biasil Lowers Cost, Improves Quality for Fort Worth Foundry
Jun, p 83

Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
Electronic Tracing System Duplicates Wood, Metal Patterns
Nov, p 151
Jones and Laughlin Ingot Foundry in Indiana Uses Mobile Mixer with Exceptionally Large Capacity
Jul, p 58
Maynard Steel Moves Transfer Cars with I-R Air Motors
Sep, p 49
Monorail System Helps Abex Mechanize Railroad Foundry
May, p 63
Morris Bean Foundry Installs Thermal Sand Reclaim System
Sep, p 49A
National Castings Solves Tough Flow Problems
Jun, p 83A
Olsen Tensile Tester Fills Pennsylvania Foundry Needs
Aug, p 53
Pneumatic Sand Conveying Helps Foundry Boost Productivity, Reduce Maintenance
Mar, p 66
Quality I-R Grinding Tools Pay Off for Seattle Foundry
May, p 62
Retrofitting of Alloy Batch Weighing Scale System Proves to be Money Saver for Houston Foundry
Feb, p 64
Temperature Pellets Assure Proper Corebaking for G & L
May, p 62A
Temperature Probe is Key to Better Metal Control
Feb, p 64A
U.S. Pipe & Foundry Selects Junker Iron Pour System
Oct, p 42
Vertical Ladle Heater Cuts Costs up to 80%
Jun, p 83B
Viable Research Efforts
Jun, p 70-71
Vibrating Bin Discharger Keeps Sand Moving at Foundry in Michigan
Jan, p 67
Vibratory Sand Mixer May Yield Material Savings by Cutting Binder Cost
Jul, p 58-59

CAST FACTS

Brinell Hardness Testing
Sep, p 43
Chill Testing of Cast Irons
Nov, p 40
The Effect of Water in Green Sand Mixtures
Jul, p 44
The Key to High Strength Gray Irons: Avoiding the Pitfalls
J. Janowak, R. Gundlach, Oct, p 38
The Reducing Action of Hydrogen is Why Seacoal Works
Aug, p 45
Venting for Coldbox Cores
Sep, p 45

CAST IRON

1981 Flow of Iron Units in the United States
Dec, p 32-33
Addition of Chromium to Cast Iron
Feb, p 52
The Basics of Heat Treating Castings
Paul J. Mikelonis, Sep, p 26-28
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Chill Testing of Cast Irons
Nov, p 40
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
Shot Peening for Improved Castings
A. T. DeLitizia, Oct, p 26-28
Taiwan Foundry Receives Inductotherm Furnace
Oct, p 42A
U.S. Pipe & Foundry Selects Junker Iron Pour System
Oct, p 42
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45
Vanadium in Cast Iron
J. V. Dawson, Jun, p 42

CASTING (GENERAL)

Nearly $5 Million in Savings Result From Annual Casting Design Winners
Dec, p 34
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

CASTING CONGRESS

At the Show
Jun, p 63-69
Castexpo '82 Draws 15,000 to Chicago
Jun, p 52-55
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
Exhibit-In-Print
Apr, p 84
Heat Treating Aluminum
Alan DeRoss, Sep, p 29-31
Heat Treating Steel Castings
Ray Pritchard, Sep, p 28-29
Metalcasting Technology Operations Management: The 1982 Casting Congress Report - Part 1
Jun, p 58-62
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

CASTINGS

The Ancient Art of Investment Casting
May, p 54
Car, Truck Sales Rise Anticipated
V. J. Adduci, Jan, p 34
Casting Increase Seen Late in '82
D. Kanicki, R. Bailey, Jan, p 37
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
Dramatic Shipment Gains Expected for 1982
Jan, p 35-36
EPS and Computers Advance Patternmaking
Aug, p 48
Farm Equipment Sales Drop in '81
Jan, p 34-35
Modest Comeback Predicted for Valve Industry
M. R. Beschloss, Jan, p 35
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43

Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Survey Reflects Continued Trend Toward Downsized Cars
Jan, p 34A

CEMENT MOLDING
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56

CENTRIFUGAL CASTING
Centrifugal Casting in Zircon Molds: The Noble Process
Earl Burden, Nov, p 20-22
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56

CERAMIC SHELL MOLDING
The Ancient Art of Investment Casting
May, p 54

CHARGE MATERIALS
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
From Japan: A High Efficiency Aluminum Melting Furnace
T. Veale, Apr, p 62-63
Inred: A New Source of Iron for the Foundry?
Robert A. Westman, Sep, p 38-39
Retrofitting of Alloy Batch Weighing Scale System Proves to be Money Saver for Houston Foundry
Feb, p 64
The Status of Critical Foundry Materials—1982
May, p 48-52

CHEMICAL ANALYSIS
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35

CHEMICALLY BONDED SAND
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
How to Analyze Coldbox Amine Percentages
Kathleen E. Carle, Mar, p 57
Jones and Laughlin Ingot Foundry in Indiana Uses Mobile Mixer with Exceptionally Large Capacity
Jul, p 58
Morris Bean Foundry Installs Thermal Sand Reclaim System
Sep, p 49A
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Vibratory Sand Mixer May Yield Material by Cutting Binder Cost
Jul, p 58A

CLEANING & FINISHING
Brinell Hardness Testing
Sep, p 43
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31
Quality I-R Grinding Tools Pay Off for Seattle Foundry
May, p 62
Shot Peening for Improved Castings
A. T. DeLitizia, Oct, p 26-28

CO_2 PROCESS
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

COKE
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52

COLD BOX PROCESS
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47
How to Analyze Coldbox Amine Percentages
Kathleen E. Carle, Mar, p 57
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
New Amine Generator Enhances Core Operations at Waupaca
F. M. Degner, K. E. Carle, Aug, p 36-38
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Venting for Coldbox Cores
Sep, p 45

COMPUTER APPLICATIONS
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
Computer Aided Design of Castings
J. A. Blevins, Jun, p 37-39
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
Computerizing Your Foundry: Conducting the Needs Analysis
Eric Forsman, Mar p 38-39
Computerizing Your Foundry: How Specialty Cast Metals Did It
Dave Ferguson, Michael A. Notte, Apr, p 55-57
Computerizing Your Foundry: What a Computer Can Mean to Your Foundry
L. Wayne Kramme, Apr, p 54-55
Computerizing Your Foundry: Your Needs Come First
Louis F. DeSilvio Mar, p 36-37
EPS and Computers Advance Patternmaking
Aug, p 48
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48

CONTINUOUS CASTING
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56

COPPER BASE ALLOYS
New Research and Technology Improves Casting Quality
Jun, p 62
Study Projects Casting Growth Through 1995
Jan, p 32-37

COREBOXES
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31
Venting for Coldbox Cores
Sep, p 45

CORES & COREMAKING
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47
High-Frequency, High-Energy System for Casting Core Removal
R. M. Leliaert, R. Riordan, Jan, p 38-39
How to Analyze Coldbox Amine Percentages
Kathleen E. Carle, Mar, p 57
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
New Amine Generator Enhances Core Operations at Waupaca
F. M. Degner, K. E. Carle, Aug, p 36-38
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Temperature Pellets Assure Proper Corebaking for G & L
May, p 62A
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45

COST REDUCTION
Can It Work Here?
Robert E. Cope, Oct, p 22-25
Controlling Energy Use Still Important in Foundries
Sep, p 41
EPS and Computers Advance Patternmaking
Aug, p 48
Morris Bean Foundry Installs Thermal Sand Reclaim System
Sep, p 49A
New Amine Generator Enhances Core Operations at Waupaca
F. M. Degner, K. E. Carle, Aug, p 36-38
A New Approach to Cupola Baghouse Design
Robert "Scotty" Clement, D. E. "Doc" Shaw, Nov, p 36-38

COSTING
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Fred O. Traenkner, Nov, p 34-35

COVER STORIES
Can It Work Here?
Robert E. Cope, Oct, p 22-25
Dedication of H. H. Harris Laboratories Marks 25 Years Commitment to Foundry Education
Sep, p 22-24
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32

CRUCIBLE FURNACES
U.S. Pipe & Foundry Selects Junker Iron Pour System
Oct, p 42

CUPOLA
The Effects of Varying Blast Air Moisture in Cupola Operations
Mar, p 58
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
A New Approach to Cupola Baghouse Design
Robert "Scotty" Clement, D. E. "Doc" Shaw, Nov, p 36-38
Sand Control and Cupola Efficiency Programs Aid Foundries
Jun, p 61A

CUPOLA FUELS
The Effects of Varying Blast Air Moisture in Cupola Operations
Mar, p 58
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
The Status of Critical Foundry Materials—1982
May, p 48-52

DEFECTS
Addition of Chromium to Cast Iron
Feb, p 52
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
Improve Annealing Practice by Controlling Composition
June, p 61
Moisture in Ingots: Aluminum's Enemy Within
Fred O. Traenkner, Sep, p 32-33
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43
Should You Be Using a Zircon Water Base Coating?
George Vingas, Mar, p 43-46
Vanadium in Cast Iron
J. V. Dawson, Jun, p 42

DESIGN
Computer Aided Design of Castings
J. A. Blevins, Jun, p 37-39
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34

DESULFURIZATION
Understanding the AOD Process
Apr, p 68

DIE CASTING
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53

DIMENSIONAL ACCURACY
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47

DIMENSIONAL TOLERANCE
Shot Peening for Improved Castings
A. T. DeLitizia, Oct, p 26-28

DUCTILE (NODULAR) IRON
Art Joins Industry at a Deere Foundry
Robert S. Lee, Mar, p 47-49
Cast Irons for Future Diesel Engines
Justin R. Drake, May, p 46-47
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Study Projects Casting Growth Through 1995
Jan, p 32-37
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Vanadium in Cast Iron
J. V. Dawson, Jun, p 42

EDUCATION & TRAINING
The Basics of Heat Treating Cast Iron
Paul Mikelonis, Sep, p 26-29
Dedication of H. H. Harris Laboratories Marks 25 Years Commitment to Foundry Education
Sep, p 22-24
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31

ENERGY
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
Controlling Energy Use Still Important in Foundries
Sep, p 41
From Japan: A High Efficiency Aluminum Melting Furnace
T. Veale, Apr, p 62-63
Inred: A New Source of Iron for the Foundry?
Robert A. Westman, Sep, p 38-39
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41
Vertical Ladle Heater Cuts Costs up to 80%
Jun, p 83B

ENVIRONMENTAL CONTROL
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Jitendra T. Radia, Thomas P. Kunes, Feb, p 48-50
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
The Foundry Landfill
T. P. Kunes, W. A. Stephens, M. E. Smith, Apr, p 64-66
How to Take a Respirable Dust Sample
Apr, p 67
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
M. E. Smith, W. A. Stephens, T. P. Kunes
May, p 43-45
Managing Hazardous Wastes in the Foundry
T. P. Kunes, W. A. Stephens, D. L. Nagle, Mar, p 40-42
A New Approach to Cupola Baghouse Design
Robert "Scotty" Clement, D. E. "Doc" Shaw, Nov, p 36-38
Overlooked Techniques for Controlling Occupational Injury and Disease Losses
Richard L. Barnes, Aug, p 33-35
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

EVAPORATIVE PATTERN CASTING PROCESS
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56

EVAPORATIVE PATTERN PROCESS
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

FEEDING
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47

FLASKLESS MOLDING
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59

FLUID FLOW
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53

FORECAST & TRENDS
COLA's Concessions Major '82 Labor Issues
C. T. Sheehan, Jan, p 36-37
Car, Truck Sales Rise Anticipated
V. J. Adduci, Jan, p 34
Casting Increase Seen Late in '82
D. Kanicki, R. Bailey, Jan, p 37
Dramatic Shipment Gains Expected for 1982
Jan, p 35-36
Farm Equipment Sales Drop in '81
Jan, p 34-35

Modest Comeback Predicted for Valve Industry
M. R. Beschloss, Jan, p 35
Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
Study Projects Casting Growth Through 1995
Jan, p 32-37
Survey Reflects Continued Trend Toward Downsized Cars
Jan, p 34A
Vendors Expect Slow Sales Early in Year
Jan, p 37A

FOUNDRY TECHNOLOGY (GENERAL)
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33
Inred: A New Source of Iron for the Foundry?
Robert A. Westman, Sep, p 38-39
New Amine Generator Enhances Core Operations at Waupaca
F. M. Degner, K. E. Carle, Aug, p 36-38
Shot Peening for Improved Castings
A. T. DeLitizia, Oct, p 26-28
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

FROM THE EDITOR
America, Inc
David P. Kanicki, Nov, p 17
Beware: Behind-the-Scenes Bureaucrats
David P. Kanicki, Aug, p 29
The Business of Communicology
Jack H. Schaum, Feb, p 37
Can We Change our Hard-Nosed Attitudes?
David P. Kanicki, Oct, p 21
Can We Manage Our Future?
David P. Kanicki, Jul, p 25
Is That Really Where You Want Them?
David P. Kanicki, Jan, p 18
Miles to Go . . . And Promises to Keep
Jack H. Schaum, Sep, p 19
One Person Can Make A Difference
Jack H. Schaum, Apr, p 49
One World . . . Same Problems
Jack H. Schaum, Jun, p 33
Pessimists and Pioneers
David P. Kanicki, May, p 29
A Question of Confidence
David P. Kanicki, Nov, p 23
The Trouble(s) with R&D
David P. Kanicki, Mar, p 33

FURAN BINDERS
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47
Technology, Operations, Management: The 1982 Casting Congress Report — Part 2
Jul, p 47-49

FURNACES
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47
From Japan: A High Efficiency Aluminum Melting Furnace
T. Veale, Apr, p 62-63
Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
Refractory Considerations for Channel Furnaces Processing Irons - Part II
Roger D. Timberlake, Jan, p 41-45

GATING
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thron, Nov, p 24-26
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
New Research and Technology Improves Casting Quality
Jun, p 62
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

GOVERNMENT REGULATIONS
Beware: Behind-the-Scenes Bureaucrats
David P. Kanicki, Aug, p 29
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Jitendra T. Radia, Thomas P. Kunes, Feb, p 48-50
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
The Foundry Landfill
T. P. Kunes, W. A. Stephens, M. E. Smith, Apr, p 64-66
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
M. E. Smith, W. A. Stephens, T. P. Kunes, May, p 43-45
Managing Hazardous Wastes in the Foundry
T. P. Kunes, W. A. Stephens, D. L. Nagle, Mar, p 40-42
Overlooked Techniques for Controlling Occupational Injury and Disease Losses
Richard L. Barnes, Aug, p 33-35

GRAY IRON
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
Casting Surface Finish Research Updated
Jun, p 62A
Centrifugal Casting in Zircon Molds: The Noble Process
Earl Burden, Nov, p 20-22
The Key to High Strength Gray Irons: Avoiding the Pitfalls
J. Janowak, R. Gundlach, Oct, p 38
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
Study Projects Casting Growth Through 1995
Jan, p 32-37
Vanadium in Cast Iron
J. V. Dawson, Jun, p 42

GRINDING
Brinell Hardness Testing
Sep, p 43
I-R Grinders Receive Dept of Labor Award
Dec, p 40
Quality I-R Grinding Tools Pay Off for Seattle Foundry
May, p 62
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

HEAT TRANSFER
Biasil Lowers Cost, Improves Quality for Fort Worth Foundry
Jun, p 83
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41

HEAT TREATING
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Controlling Energy Use Still Important in Foundries
Sep, p 41
Improve Annealing Practice by Controlling Composition
Jun, p 61
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48

HIGH PRESSURE MOLDING
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

HOT BOX PROCESS
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32

IMPACT REPORTS
The Crisis of Strategic Metals "OPEC of the '80s"
John E. Miller, Jan, p 52-56
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31

IMPORTS
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45

IN-MOLD PROCESS
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42

INDUCTION FURNACE
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Charging the Coreless Furnace - Part 3
K. W. Copi, Nov, p 23-26
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52

Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
Refractory Considerations for Channel Furnaces Processing Irons - Part II
Roger D. Timberlake, Jan, p 41-45
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Understanding the AOD Process
Apr, p 68

INDUSTRIAL ENGINEERING
Industrial Engineering in the Foundry: An Introduction
J. A. Westover, Dec, p 27
Quality Control Circles Dominate Engineering Sessions
June, p 62B
Wagner Castings: A View of Industrial Engineering
John A. Wagner Jr., Mar, p 50-52

INGOT MOLDS
Jones and Laughlin Ingot Foundry in Indiana Uses Mobile Mixer with Exceptionally Large Capacity
Jul, p 58
Moisture in Ingots: Aluminum's Enemy Within
Fred O. Traenkner, Sep, p 32-33

INOCULATION
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41
Vanadium in Cast Iron
J. V. Dawson, Jun, p 42

INTERNATIONAL FOUNDRY CONGRESS
April is Foundry Month in Chicago
Mar, p 34-35
Viable Research Efforts
Jun, p 70-71

INVESTMENT BINDERS
The Ancient Art of Investment Casting
May, p 54

INVESTMENT CASTING
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43

LADLE PRACTICE
Vertical Ladle Heater Cuts Costs up to 80%
Jun, p 83B

MAGNESIUM
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Study Projects Casting Growth Through 1995
Jan, p 32-37

MAINTENANCE
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Jitendra T. Radia, Thomas P. Kunes, Feb, p 48-50
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31

MALLEABLE IRON
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Improve Annealing Practice by Controlling Composition
Jun, p 61
Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
Study Projects Casting Growth Through 1995
Jan, p 32-37

MANAGEMENT
1981 Flow of Iron Units in the United States
Dec, p 32-33
Automating Britain's Foundries
Eric Ford, Jun, p 46-48
COLA's Concessions Major '82 Labor Issues
C. T. Sheehan, Jan, p 36-37
Can It Work Here?
Robert E. Cope, Oct, p 22-25
Can We Change Our Hard-Nosed Attitudes?
David P. Kanicki, Oct, p 21
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
Computerizing Your Foundry: Conducting the Needs Analysis
Eric Forsman, Mar, p 38-39
Computerizing Your Foundry: How Specialty Cast Metals Did It
Dave Ferguson, Michael A. Notte, Apr, p 55-57
Computerizing Your Foundry: What a Computer Can Mean to Your Foundry
L. Wayne Kramme, Apr, p 54-55
Computerizing Your Foundry: Your Needs Come First
Louis F. DeSilvio, Mar, p 36-37
The Crisis of Strategic Metals "OPEC of the '80s"
John E. Miller, Jan, p 52-56
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
The Foundry Landfill
T. P. Kunes, W. A. Stephens, M. E. Smith, Apr, p 64-66
Industrial Engineering in the Foundry: An Introduction
J. A. Westover, Dec, p 27
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
M. E. Smith, W. A. Stephens, T. P. Kunes, May, p 43-45
Managing Hazardous Wastes in the Foundry
T. P. Kunes, W. A. Stephens, D. L. Nagle, Mar, p 40-42
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31
Overlooked Techniques for Controlling Occupational Injury and Disease Losses - Part 2
Richard L. Barnes, Sep, p 34-37
Overlooked Techniques for Controlling Occupational Injury and Disease Losses
Richard L. Barnes, Aug, p 33-35
Quality Control Circles Dominate Engineering Sessions
Jun, p 62B
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43
The Robot's Role in Foundry Mechanization
Charles F. James Jr, Gerin J. Sylvia, May, p 30-33
The Status of Critical Foundry Materials—1982
May, p 48-52
Study Projects Casting Growth Through 1995
Jan, p 32-37
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45
Wagner Castings: A View of Industrial Engineering
John A. Wagner, Jr, Mar, p 50-52

MARKETING
Car, Truck Sales Rise Anticipated
V. J. Adduci, Jan, p 34
Cast Irons for Future Diesel Engines
Justin R. Drake, May, p 46-47
Casting Increase Seen Late in '82
D. Kanicki, R. Bailey, Jan, p 37
Dramatic Shipment Gains Expected for 1982
Jan, p 35-36
Farm Equipment Sales Drop in '81
Jan, p 34-35
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31
Modest Comeback Predicted for Valve Industry
M. R. Beschloss, Jan, p 35
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Study Projects Casting Growth Through 1955
Jan, p 32-37
Survey Reflects Continued Trend Toward Downsized Cars
Jan, p 34A
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45
Vendors Expect Slow Sales Early in Year
Jan, p 37A

MATERIALS HANDLING
Apron Conveyor Improves Foundry Scrap Reclaiming
Mar, p 66A
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
Monorail System Helps Abex Mechanize Railroad Foundry
May, p 63

National Castings Solves Tough Flow Problems
Jun, p 83A
Pneumatic Sand Conveying Helps Foundry Boost Productivity, Reduce Maintenance
Mar, p 66
Retrofitting of Alloy Batch Weighing Scale System Proves to be Money Saver for Houston Foundry
Feb, p 64
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33
Vibrating Bin Discharger Keeps Sand Moving at Foundry in Michigan
Jan, p 67

MECHANICAL PROPERTIES
Cast Irons for Future Diesel Engines
Justin R. Drake, May, p 46-47
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34

MECHANIZATION
Automating Britain's Foundries
Eric Ford, Jun, p 46-48
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
High-Frequency, High-Energy System for Casting Core Removal
R. M. Leliaert, R. Riordan, Jan, p 38-39
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36

MELTING PRACTICES
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
The Effects of Varying Blast Air Moisture in Cupola Operations
Mar, p 58
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
From Japan: A High Efficiency Aluminum Melting Furnace
T. Veale, Apr, p 62-63
Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
A New Approach to Cupola Baghouse Design
Robert "Scotty" Clement, D. E. "Doc" Shaw, Nov, p 36-38
Pillar Introduces Redi-Melt
Oct, p 42B
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Taiwan Foundry Receives Inductotherm Furnace
Oct, p 42A
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Fred O. Traenkner, Nov, p 34-35
Understanding the AOD Process
Apr, p 68

METALLOGRAPHY & MICROSTRUCTURES
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37

METALLURGY
Addition of Chromium to Cast Iron
Feb, p 52
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Improve Annealing Practice by Controlling Composition
Jun, p 61
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
New Research and Technology Improves Casting Quality
Jun, p 62
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Vanadium in Cast Iron
J. V. Dawson, Jun, p 42

MICROSTRUCTURE
Brinell Hardness Testing
Sep, p 43

MODERNIZATION
Evaporative Cooling System Brings Old PC Equipment into Compliance
Sep, p 50

MOLD MATERIALS
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

MOLD WASHES
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
Should You be Using a Zircon Water Base Coating?
George Vingas, Mar, p 43-46
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

MOLDING
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33
How to Analyze Coldbox Amine Percentages
Kathleen E. Carle, Mar, p 57
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

MOLDS
Centrifugal Casting in Zircon Molds: The Noble Process
Earl Burden, Nov, p 20-22
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
Maynard Steel Moves Transfer Cars with I-R Air Motors
Sep, p 49
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

NICKEL ALLOYS
The Crisis of Strategic Metals "OPEC of the '80s"
John E. Miller, Jan, p 52-56
The Status of Critical Foundry Materials—1982
May, p 48-52

NODULIZING TREATMENT
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48

NOISE ABATEMENT
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

NONDESTRUCTIVE TESTING
Passageway Detector Introduced by BCIRA
Dec, p 40A
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59

NONFERROUS (OTHER METALS)
Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41

NUMERICAL CONTROL
EPS and Computers Advance Patternmaking
Aug, p 48
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31

OPERATIONAL RESEARCH
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Moisture in Ingots: Aluminum's Enemy Within
Fred O. Traenkner, Sep, p 32-33
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Fred O. Traenkner, Nov, p 34-35

PATTERN COATING
EPS and Computers Advance Patternmaking
Aug, p 48

PATTERNMAKERS SHRINKAGE
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

PATTERNS & PATTERNMAKING
Art Joins Industry at a Deere Foundry
Robert S. Lee, Mar, p 47-49
Computer Aided Design of Castings
J. A. Blevins, Jun, p 37-39
EPS and Computers Advance Patternmaking
Aug, p 48
Electronic Tracing System Duplicates Wood, Metal Patterns
Nov, p 151
Maynard Steel Moves Transfer Cars with I-R Air Motors
Sep, p 49
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61
Venting for Coldbox Cores
Sep, p 45

PERMANENT MOLD CASTING
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37

PIG IRON
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Inred: A New Source of Iron for the Foundry?
Robert A. Westman, Sep, p 38-39
The Status of Critical Foundry Materials—1982
May, p 48-52

PLANT ENGINEERING
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Jitendra T. Radia, Thomas P. Kunes, Feb, p 48-50
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

PLANT LAYOUT AND MATERIAL FLOW
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45

PNEUMATIC SYSTEMS
Pneumatic Sand Conveying Helps Foundry Boost Productivity, Reduce Maintenance
Mar, p 66

POLLUTION CONTROL
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
Evaporative Cooling System Brings Old PC Equipment into Compliance
Sep, p 50
The Foundry Landfill
T. P. Kunes, W. A. Stephens, M. E. Smith, Apr, p 64-66

POURING
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42
How to Take a Respirable Dust Sample
Apr, p 67
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41
U.S. Pipe & Foundry Selects Junker Iron Pour System
Oct, p 42
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

PREHEATING
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42
Charging the Coreless Furnace - Part 3
K. W. Copi, Nov, p 23-26
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
Vertical Ladle Heater Cuts Costs up to 80%
Jun, p 83B

PROCESS CONTROL
Addition of Chromium to Cast Iron
Feb, p 52
Computerizing Your Foundry: How Specialty Cast Metals Did It
Dave Ferguson, Michael A. Notte, Apr, p 55-57
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33
Wagner Castings: A View of Industrial Engineering
John A. Wagner Jr., Mar, p 50-52

PRODUCT OF THE MONTH
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
Evaporative Cooling System Brings Old PC Equipment into Compliance
Sep, p 50
I-R Grinders Receive Dept of Labor Award
Dec, p 40
New Line of Insulating Riser Sleeves and Shapes Now Available
Aug, p 53A
Passageway Detector Introduced by BCIRA
Dec, p 40A
Pillar Introduces Redi-Melt
Oct, p 42B
Pneu-Tek Miniscrubber Available from Wheelabrator-Frye
Nov, p 151B
Thermal Sand Reclaimer Cuts Fuel Consumption
Nov, p 151A
Vibratory Sand Mixer May Yield Material By Cutting Binder Cost
Jul, p 58A

PRODUCTION CONTROL
Overlooked Techniques for Controlling Occupational Injury and Disease Losses - Part 2
Richard L. Barnes, Sep, p 34-37

PRODUCTIVITY
Can It Work Here?
Robert E. Cope, Oct, p 22-25
Charging the Coreless Furnace - Part 3
K. W. Copi, Nov, p 23-26
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
Industrial Engineering in the Foundry: An Introduction
J. A. Westover, Dec, p 27
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31

PROPERTIES
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37

QUALITY CONTROL
Can It Work Here?
Robert E. Cope, Oct, p 22-25
Can We Change Our Hard-Nosed Attitudes?
David P. Kanicki, Oct, p 21
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
How to Perform a Methylene Blue Test
May, p 53
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31
New Research and Technology Improves Casting Quality
Jun, p 62
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Temperature Probe is Key to Better Metal Control
Feb, p 64A
Wagner Castings: A View of Industrial Engineering
John A. Wagner Jr., Mar, p 50-52

RADIOGRAPHS & RADIOGRAPHY
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43

RECLAMATION
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42

RECYCLING
The Crisis of Strategic Metals "OPEC of the '80s"
John E. Miller, Jan, p 52-56
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
M. E. Smith, W. A. Stephens, T. P. Kunes, May, p 43-45
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42

REFRACTORIES
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
Refractory Considerations for Channel Furnaces Processing Irons - Part II
Roger D. Timberlake, Jan, p 41-45
The Status of Critical Foundry Materials—1982
May, p 48-52

RISERING
New Line of Insulating Riser Sleeves and Shapes Now Available
Aug, p 53A
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48

SAFETY & HEALTH
Beware: Behind-the-Scenes Bureaucrats
David P. Kanicki, Aug, p 29
Charging the Coreless Furnace - Part 3
K. W. Copi, Nov, p 23-26
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
How to Take a Respirable Dust Sample
Apr, p 67
I-R Grinders Receive Dept of Labor Award
Dec, p 40
Moisture in Ingots: Aluminum's Enemy Within
Fred O. Traenkner, Sep, p 32-33
Overlooked Techniques for Controlling Occupational Injury and Disease Losses - Part 2
Richard L. Barnes, Sep, p 34-37
Overlooked Techniques for Controlling Occupational Injury and Disease Losses
Richard L. Barnes, Aug, p 33-35
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

SAND ADDITIVES
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
The Reducing Action of Hydrogen is Why Seacoal Works
Aug, p 45
The Status of Critical Foundry Materials—1982
May, p 48-52
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

SAND BINDERS (See also Specific Type)
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
The Effect of Water in Green Sand Mixtures
Jul, p 44
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
The Status of Critical Foundry Materials—1982
May, p 48-52
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Vibratory Sand Mixer May Yield Material Savings by Cutting Binder Cost
Jul, p 58-59

SAND CHROMITE
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33

SAND CONDITIONING
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42

SAND FLOWABILITY
A Computer Program for Determining Sieve Distribution Analysis
Jul, p 45
The Effect of Water in Green Sand Mixtures
Jul, p 44
National Castings Solves Tough Flow Problems
Jun, p 83A

SAND MOLDING
Biasil Lowers Cost, Improves Quality for Fort Worth Foundry
Jun, p 83
The Effect of Water in Green Sand Mixtures
Jul, p 44
How to Perform a Methylene Blue Test
May, p 53
How to Run Sand Compactability Tests
Feb, p 53
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56
Should You be Using a Zircon Water Base Coating?
George Vingas, Mar, p 43-46
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49

SAND PREPARATION
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
Jones and Laughlin Ingot Foundry in Indiana Uses Mobile Mixer with Exceptionally Large Capacity
Jul, p 58
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation

Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Vibrating Bin Discharger Keeps Sand Moving at Foundry in Michigan
Jan, p 67
Vibratory Sand Mixer May Yield Material Savings by Cutting Binder Cost
Jul, p 58-59

SAND PROPERTIES
A Computer Program for Determining Sieve Distribution Analysis
Jul, p 45
The Effect of Water in Green Sand Mixtures
Jul, p 44
Jones and Laughlin Ingot Foundry in Indiana Uses Mobile Mixer with Exceptionally Large Capacity
Jul, p 58
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
Vibratory Sand Mixer May Yield Material Savings by Cutting Binder Cost
Jul, p 58-59

SAND RECLAMATION & RECYCLING
Apron Conveyor Improves Foundry Scrap Reclaiming
Mar, p 66A
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
M. E. Smith, W. A. Stephens, T. P. Kunes, May, p 43-45
Morris Bean Foundry Installs Thermal Sand Reclaim System
Sep, p 49A
Pneu-Tek Miniscrubber Available from Wheelabrator-Frye
Nov, p 151B
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
Thermal Sand Reclaimer Cuts Fuel Consumption
Nov, p 151A
Vibrating Bin Discharger Keeps Sand Moving at Foundry in Michigan
Jan, p 67

SAND SYSTEMS
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
Vibrating Bin Discharger Keeps Sand Moving at Foundry in Michigan
Jan, p 67

SAND TECHNOLOGY (GENERAL)
Casting Surface Finish Research Updated
Jun, p 62A
A Computer Program for Determining Sieve Distribution Analysis
Jul, p 45
The Effect of Water in Green Sand Mixtures
Jul, p 44
How to Perform a Methylene Blue Test
May, p 53
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
The Reducing Action of Hydrogen is Why Seacoal Works
Aug, p 45
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61

SAND TESTING AND CONTROL
Casting Surface Finish Research Updated
Jun, p 62A
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33
How to Perform a Methylene Blue Test
May, p 53
How to Run Sand Compactability Tests
Feb, p 53
Sand Control and Cupola Efficiency Programs Aid Foundries
Jun, p 61A

SCRAP
1981 Flow of Iron Units in the United States
Dec, p 32-33
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42
Charging the Coreless Furnace - Part 3
K. W. Copi, Nov, p 23-26
Inred: A New Source of Iron for the Foundry?
Robert A. Westman, Sep, p 38-39
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43
The Status of Critical Foundry Materials—1982
May, p 48-52

SCRAP RECLAMATION
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30

SHAKEOUT
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28

SHELL CORES
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41

SOLIDIFICATION
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
The Key to High Strength Gray Irons: Avoiding the Pitfalls
J. Janowak, R. Gundlach, Oct, p 38
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48

SOLVING PEOPLE PROBLEMS
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31

SPECTROGRAPHIC ANALYSIS
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48

STEEL
1981 Flow of Iron Units in the United States
Dec, p 32-33
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
Study Projects Casting Growth Through 1995
Jan, p 32-37

STEEL ALLOYS
Computerizing Your Foundry: How Specialty Cast Metals Did It
Dave Ferguson, Michael A. Notte, Apr, p 55-57
Computers and Automation Highlighted in Varied Program
Jul, p 49-50
Understanding the AOD Process
Apr, p 68

SUBVERSIVE ELEMENTS
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52

SURFACE FINISHING
Casting Surface Finish Research Updated
Jun, p 62A
New Amine Generator Enhances Core Operations at Waupaca
F. M. Degner, K. E. Carle, Aug, p 36-38

TESTING AND CONTROL
Brinell Hardness Testing
Sep, p 43
Chill Testing of Cast Irons
Nov, p 40
How to Perform a Methylene Blue Test
May, p 53
How to Run Sand Compactability Tests
Feb, p 53
How to Take a Respirable Dust Sample
Apr, p 67
Moisture in Ingots: Aluminum's Enemy Within
Fred O. Traenkner, Sep, p 32-33
Olsen Tensile Tester Fills Pennsylvania Foundry Needs
Aug, p 53
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Temperature Pellets Assure Proper Corebaking for G & L
May, p 62A
Temperature Probe is Key to Better Metal Control
Feb, p 64A

TITANIUM
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Fred O. Traenkner, Nov, p 34-35

TRADE ASSOCIATION NEWS
Applied Technology: Key to Future Success
Feb, p 23-26
CMF Joins Coalition to Promote Free Trade
Sep, p 10
COLAs Major Labor Issue in '82 as Unions Pull Back Demands
Apr, p 22
Committee Activities to be Emphasized in 1983
Dec, p 11
Diecasters Dedicate New Headquarters
Jul, p 20
Does Survival Hinge on Concessions in Collective Bargaining?
Jul, p 15-16
Energy and Attitude: Keys to Effective Selling
Jul, p 19
Equipment Manufacturers Look at Business Trends for 1985
May, p 19
FEF Stresses Human Resources, Honors Walsh
Feb, p 21
Myriad of Tough Issues Facing Foundry Industry
Apr, p 21-22
Nearly $5 Million in Savings Result From Annual Casting Design Winners
Dec, p 34
New Beginning
Sep, p 25
Productivity, A Key to Survival in Today's Economy
May, p 13
U.S. Ironcasters Holding Tight for 1983
Nov, p 13-14

TRENDS & RESEARCH
Cast Irons for Future Diesel Engines
Justin R. Drake, May, p 46-47
The Crisis of Strategic Metals "OPEC of the '80s"
John E. Miller, Jan, p 52-56
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
New Research and Technology Improves Casting Quality
Jun, p 62
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33

V-PROCESS
Computers and Automation Highlighted in Varied Program
Jul, p 49-50

WASTE BY-PRODUCTS
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39

WATER POLLUTION CONTROL
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
The Foundry Landfill
T. P. Kunes, W. A. Stephens, M. E. Smith, Apr, p 64-66
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
Managing Hazardous Wastes in the Foundry
T. P. Kunes, W. A. Stephens, D. L. Nagle, Mar, p 40-42
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41

EXACT TITLES OF ARTICLES

A
Addition of Chromium to Cast Iron
Feb, p 52
AFS Congress & Castexpo '82 Preview
Apr, p 69-70
AFS President Calls for Improving Industry Image
Apr, p 144
America, Inc
David P. Kanicki, Nov, p 17
The Ancient Art of Investment Casting
May, p 54
Applied Technology: Key to Future Success
Feb, p 23-26
April is Foundry Month in Chicago
Mar, p 34-35
Apron Conveyor Improves Foundry Scrap Reclaiming
Mar, p 66A
Art Joins Industry at a Deere Foundry
Robert S. Lee, Mar, p 47-49
At the Show
Jun, p 63-69
Automating Britain's Foundries
Eric Ford, Jun, p 46-48
Auxiliary Equipment Plays Important Role in Melting Operations
Sep, p 42

B
The Basics of Heat Treating Castings
Paul Mikelonis, Sep, p 26-28
Beware: Behind-the-Scenes Bureaucrats
David P. Kanicki, Aug, p 29
Biasil Lowers Cost, Improves Quality for Fort Worth Foundry
Jun, p 83
Bilingual Regional in Montreal
Feb, p 58
Brinell Hardness Testing
Sep, p 43
The Business of Communicology
Jack H. Schaum, Feb, p 37

C
Can It Work Here?
Robert E. Cope, Oct, p 22-25
Can We Change Our Hard-Nosed Attitudes?
David P. Kanicki, Oct, p 21
Can We Manage Our Future?
David P. Kanicki, Jul, p 25
Car, Truck Sales Rise Anticipated
V. J. Adduci, Jan, p 34
Cast Irons for Future Diesel Engines
Justin R. Drake, May, p 46-47
Castexpo '82 Draws 15,000 to Chicago
Jun, p 52-55
Casting Increase Seen Late in '82
David P. Kanicki, Robin Bailey, Jan, p 37
Casting Surface Finish Research Updated
Jun, p 62A
Centrifugal Casting in Zircon Molds: The Noble Process
Earl Burden, Nov, p 20-22
Charge Makeup for Coreless Melting - Part 2
Paul J. Mikelonis, Nov, p 27-30
Charge Makeup for Coreless Melting
Paul J. Mikelonis, Oct, p 33-35
Charging the Coreless Furnace - Part 3
K. W. Copi, Nov, p 23-26
A Checklist for the Mechanical Properties of Aluminum Castings
Fred O. Traenkner, Oct, p 36-37
Chill Testing of Cast Irons
Nov, p 40
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Robin Bailey, Jan, p 46-49
CMF Joins Coalition to Promote Free Trade
Sep, p 10
COLA's Concessions Major '82 Labor Issues
C. T. Sheehan, Jan, p 36-37
COLAs Major Labor Issue in '82 as Unions Pull Back Demands
Apr, p 22
Committee Activities to be Emphasized in 1983
Dec, p 11
Computer Aided Design of Castings
J. A. Blevins, Jun, p 37-39
A Computer Program for Determining Sieve Distribution Analysis
Jul, p 45
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Walter J. Thrun, Nov, p 24-26
Computerizing Your Foundry: Conducting the Needs Analysis
Eric Forsman, Mar, p 38-39
Computerizing Your Foundry: How Specialty Cast Metals Did It
Dave Ferguson, Michael A. Notte, Apr, p 55-57
Computerizing Your Foundry: What a Computer Can Mean to Your Foundry
L. Wayne Kramme, Apr, p 54-55
Computerizing Your Foundry: Your Needs Come First
Louis F. DeSilvio, Mar, p 36-37
Computers and Automation Highlighted in Varied Program
Jul, p 49-50

Controlling Energy Use Still Important in Foundries
Sep, p 41
The Crisis of Strategic Metals "OPEC of the '80s"
John E. Miller, Jan, p 52-56

D
Dedication of H. H. Harris Laboratories Marks 25 Years Commitment to Foundry Education
Sep, p 22-24
Denver Equipment Goes 100% to Furan Flaskless in its Molding
Jul, p 59
Determining Sieve Analysis of Foundry Sands
Nov, p 31-33
Diecasters Dedicate New Headquarters
Jul, p 20
Does Survival Hinge on Concessions in Collective Bargaining
Jul, p 15-16
Dramatic Shipment Gains Expected for 1982
Jan, p 35-36
Drew Lewis is Keynote Speaker at Meeting Which Focuses on Blueprint for Survival
Jan, p 58

E
The Effect of Water in Green Sand Mixtures
Jul, p 44
The Effects of Iron Oxide Additions on Core Properties and Casting Quality
Oct, p 29-32
The Effects of Varying Blast Air Moisture in Cupola Operations
Mar, p 58
Electronic Tracing System Duplicates Wood, Metal Patterns
Nov, p 151
Energy and Attitude: Keys to Effective Selling
Jul, p 19
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Jitendra T. Radia, Thomas P. Kunes, Feb, p 48-50
Environmental Management: A Critical Siting and Expansion Issue
Thomas P. Kunes, Jul, p 38-39
EPS and Computers Advance Patternmaking
Aug, p 48
Equipment Manufacturers Look at Business Trends for 1985
May, p 19
Evaporative Cooling System Brings Old PC Equipment into Compliance
Sep, p 50
Exhibit-in-Print
Apr, p 84
Extensive Regional Program Takes Look at Future and the Present
Jan, p 60

F
Farm Equipment Sales Drop in '81
Jan, p 34-35
FEF Stresses Human Resources, Honors Walsh
Feb, p 21
Ferrous Scrap Quality Report Stirs Controversy
Jul, p 50-52
The Foundry Landfill
T. P. Kunes, W. A. Stephens, M. E. Smith, Apr, p 64-66
Foundry Maintenance Masters New Technologies
Jack H. Schaum, Aug, p 30-32
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Eric Ford, Feb, p 46-47
From Japan: A High Efficiency Aluminum Melting Furnace
T. Veale, Apr, p 62-63

G
Gating for the In-the-Mold Process
Thomas E. Prucha, Feb, p 38-42

H
Heat Treating Aluminum
Alan DeRoss, Sep, p 29-31
Heat Treating Steel Castings
Ray Pritchard, Sep, p 28-29
High-Frequency, High-Energy System for Casting Core Removal
R. M. Leliaert, R. Riordan, Jan, p 38-39
How to Analyze Coldbox Amine Percentages
Kathleen E. Carle, Mar, p 57
How to Perform a Methylene Blue Test
May, p 53
How to Run Sand Compactability Tests
Feb, p 53
How to Take a Respirable Dust Sample
Apr, p 67

I
Improve Annealing Practice by Controlling Composition
Jun, p 61
Industrial Engineering in the Foundry: An Introduction
J. A. Westover, Dec, p 27
Industry Woes Can be Solved in Part By Commitment from Top Management
Jan, p 62
Inorganic Binders, Current Status and Future
Robin Bailey, May, p 34-36
Inred: A New Source of Iron for the Foundry?
Robert A. Westman, Sep, p 38-39
Integrating Health Hazard Controls With Plant and Process Engineering
L. T. Radia, T. P. Kunes, R. E. Zayko, Jun, p 43-45
I-R Grinders Receive Dept of Labor Award
Dec, p 40
Is That Really Where You Want Them?
David P. Kanicki, Jan, p 18

J
Jones and Laughlin Ingot Foundry in Indiana Uses Mobile Mixer with Exceptionally Large Capacity
Jul, p 58

K
The Key to High Strength Gray Irons: Avoiding the Pitfalls
J. Janowak, R. Gundlach, Oct, p 38

M
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
M. E. Smith, W. A. Stephens, T. P. Kunes, May, p 43-45
Managing Hazardous Wastes in the Foundry
T. P. Kunes, W. A. Stephens, D. L. Nagle, Mar, p 40-42
Managing Opportunities in the 80's
Charles F. Knight, Jul, p 26-31
Maynard Steel Moves Transfer Cars with I-R Air Motors
Sep, p 49
Melting With a Medium Frequency Furnace
William F. Hipple, Aug, p 39-41
Metalcasting, Versatile and Interesting
Robin Bailey, Mar, p 53-56
Metalcasting Technology Operations Management: The 1982 Casting Congress Report - Part 1
Jun, p 58-62
Miles to Go . . . And Promises to Keep
Jack H. Schaum, Sep, p 19
Modest Comeback Predicted for Valve Industry
M. R. Beschloss, Jan, p 35
Moisture in Ingots: Aluminum's Enemy Within
Fred O. Traenkner, Sep, p 32-33
Monorail System Helps Abex Mechanize Railroad Foundry
May, p 63
Morris Bean Foundry Installs Thermal Sand Reclaim System
Sep, p 49A
Myriad of Tough Issues Facing Foundry Industry
Apr, p 21-22

N
National Castings Solves Tough Flow Problems
Jun, p 83A
Nearly $5 Million in Savings Result From Annual Casting Design Winners
Dec, p 34
New Amine Generator Enhances Core Operations at Waupaca
F. M. Degner, K. E. Carle, Aug, p 36-38
New Approach Proposed for Alloying Cast Iron
Jun, p 59-61
A New Approach to Cupola Baghouse Design
Robert "Scotty" Clement, D. E. "Doc" Shaw, Nov, p 36-38
New Beginning
Sep, p 25
A New Development in Ferrous Permanent Mold Casting
Antony P. Clark, Jun, p 40-41
New Line of Insulating Riser Sleeves and Shapes Now Available
Aug, p 53A
New Research and Technology Improves Casting Quality
Jun, p 62
1981 Flow of Iron Units in the United States
Dec, p 32-33

O
Olsen Tensile Tester Fills Pennsylvania Foundry Needs
Aug, p 53
One Person Can Make a Difference
Jack H. Schaum, Apr, p 49
One World . . . Same Problems
Jack H. Schaum, Jun, p 33
Overlooked Techniques for Controlling Occupational Injury and Disease Losses - Part 2
Richard L. Barnes, Sep, p 34-37
Overlooked Techniques for Controlling Occupational Injury and Disease Losses
Richard L. Barnes, Aug, p 33-35

P
Passageway Detector Introduced by BCIRA
Dec, p 40A
Patternmaking Today: An AFS-CMI Conference On Pattern and Corebox Technology
Robin Bailey, Dec, p 28-31
Pessimists and Pioneers
David P. Kanicki, May, p 29
Pillar Introduces Redi-Melt
Oct, p 42B
Pneu-Tek Miniscrubber Available from Wheelabrator-Frye
Nov, p 151B

Pneumatic Sand Conveying Helps Foundry Boost Productivity, Reduce Maintenance
Mar, p 66
Porous Castings? HIPping Might Be Your Answer
Dr. R. Widmer, Dr. P. E. Price, Aug, p 42-43
The Position of the Low Pressure Process in the Aluminum Casting Market
Robert E. Cope, Apr, p 50-53
Premium Quality Aerospace Castings Target of Intensive Research Efforts
Jun, p 58-59
Producing As-Cast Ductile Iron in Iron Permanent Molds
B. C. Godsell, Jul, p 35-37
Productivity, A Key to Survival in Today's Economy
May, p 13

Q

Quality Control Circles Dominate Engineering Sessions
Jun, p 62B
Quality I-R Grinding Tools Pay Off for Seattle Foundry
May, p 62
Quality: How Much Does It Really Cost?
Ralph J. Teetor III, Jul, p 40-43
A Question of Confidence
David P. Kanicki, Nov, p 23

R

Recovery Expected for Ferrous Castings
Robert A. Ricciuti, Jan, p 33-34
The Reducing Action of Hydrogen is Why Seacoal Works
Aug, p 45
Refractory Considerations for Channel Furnaces Processing Irons - Part II
Robert D. Timberlake, Jan, p 41-45
Retrofitting of Alloy Batch Weighing Scale System Proves to be Money Saver for Houston Foundry
Feb, p 64
The Robot's Role in Foundry Mechanization
Charles F. James Jr., Gerin J. Sylvia, May, p 30-33

S

Sand Control and Cupola Efficiency Programs Aid Foundries
Jun, p 61A
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
W. E. Schulze, May, p 38-40
Sand Reclamation: An Equipment Update - Mechanical Attrition
May, p 37-38
Sand Reclamation: An Equipment Update - Thermal Reclamation
Augustine J. Deering, May, p 40-41
Sand Reclamation: An Equipment Update - Wet Reclamation
J. W. Wasem, May, p 41-42
Sheppard Foundry Prefers CG Iron
Jack H. Schaum, Jun, p 34-36
Shot Peening for Improved Castings
A. T. DeLitizia, Oct, p 26-28
Should You be Using a Zircon Water Base Coating?
George Vingas, Mar, p 43-46
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
E. Bossing, Jul, p 32-34
Southeast Chapters Celebrate 50th Annual Meeting
Apr, p 142
The Status of Critical Foundry Materials—1982
May, p 48-52
Study Projects Casting Growth Through 1995
Jan, p 32-37
Survey Reflects Continued Trend Toward Downsized Cars
Jan, p 34A

T

Taiwan Foundry Receives Inductotherm Furnace
Oct, p 42A
Technology, Operations, Management: The 1982 Casting Congress Report - Part 2
Jul, p 47-49
Technology, Operations, Management: The 1982 Casting Congress Report - Part 3
Aug, p 46-48
Technology, Operations, Management: The 1982 Casting Congress Report - Part 4
Sep, p 40-41
Temperature Pellets Assure Proper Corebaking for G & L
May, p 62A
Temperature Probe is Key to Better Metal Control
Feb, p 64A
Thermal Sand Reclaimer Cuts Fuel Consumption
Nov, p 151A
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Fred O. Traenkner, Nov, p 34-35
The Trouble(s) with R&D
David P. Kanicki, Mar, p 33

U

Understanding the AOD Process
Apr, p 68
Understanding the Evaporative Pattern Casting Process (EPC)
Robin Bailey, Apr, p 58-61
U.S. and Worldwide Foundry Trends
A. Dorfmueller, R. Naro, J. Sparks, Feb, p 43-45
U.S. Ironcasters Holding Tight for 1983
Nov, p 13-14
U.S. Pipe & Foundry Selects Junker Iron Pour System
Oct, p 42

V

Vanadium in Cast Iron
J. V. Dawson, Jun, p 42
Vendors Expect Slow Sales Early in Year
Jan, p 37A
Venting for Coldbox Cores
Sep, p 45
Vertical Ladle Heater Cuts Costs up to 80%
Jun, p 83B
Viable Research Efforts
Jun, p 70-71
Vibrating Bin Discharger Keeps Sand Moving at Foundry in Michigan
Jan, p 67
Vibratory Sand Mixer May Yield Material Savings by Cutting Binder Cost
Jul, p 58-59

W

Wagner Castings: A View of Industrial Engineering
John A. Wagner Jr., Mar, p 50-52

AUTHORS

A

Adduci, V. J.
Car, Truck Sales Rise Anticipated
Jan, p 34

B

Bailey, R./Kanicki, D.
Casting Increase Seen Late in '82
Jan, p 37

Bailey, Robin
The Cleaning Room of the 1980s: Sculpturing Room or Profit Center?
Jan, p 46-49
Inorganic Binders, Current Status and Future
May, p 34-36
Metalcasting, Versatile and Interesting
Mar, p 53-56
Patternmaking Today: An AFS-CMI Conference on Pattern and Corebox Technology
Dec, p 28-31
Understanding the Evaporative Pattern Casting Process (EPC)
Apr, p 58-61

Barnes, Richard L.
Overlooked Techniques for Controlling Occupational Injury and Disease Losses - Part 2
Sep, p 34-37
Overlooked Techniques for Controlling Occupational Injury and Disease Losses
Aug, p 33-35

Beschloss, M. R.
Modest Comeback Predicted for Valve Industry
Jan, p 35

Blevins, J. A.
Computer Aided Design of Castings
Jun, p 37-39

Bossing, E.
Side Pour: A Unique Approach to Producing Thin Wall Aluminum Castings
Jul, p 32-34

Burden, Earl
Centrifugal Casting in Zircon Molds: The Noble Process
Nov, p 20-22

C

Carle, K. E./Degner, F. M.
New Amine Generator Enhances Core Operations at Waupaca
Aug, p 36-38

Carle, Kathleen E.
How to Analyze Coldbox Amine Percentages
Mar, p 57

Clark, Antony P.
A New Development in Ferrous Permanent Mold Casting
Jun, p 40-41

Clement, Robert "Scotty"/Shaw, D. E. "Doc"
A New Approach to Cupola Baghouse Design
Nov, p 36-38

Cope, Robert E.
Can It Work Here?
Oct, p 22-25
The Position of the Low Pressure Process in the Aluminum Casting Market
Apr, p 50-53

Copi, K. W.
Charging the Coreless Furnace - Part 3
Nov, p 23-26

D

Dawson, J. V.
Vanadium in Cast Iron
Jun, p 42

Deering, Augustine J.
Sand Reclamation: An Equipment Update - Thermal Reclamation
May, p 40-41

Degner, F. M./Carle, K. E.
New Amine Generator Enhances Core Operations at Wuapaca
Aug, p 36-38
DeLitizia, A. T.
Shot Peening for Improved Castings
Oct, p 26-28
DeRoss, Alan
Heat Treating Aluminum
Sep, p 29-31
DeSilvio, Louis F.
Computerizing Your Foundry: Your Needs Come First
Mar, p 36-37
Dorfmueller, A./Naro, R./Sparks, J.
U.S. and Worldwide Foundry Trends
Feb, p 43-45
Drake, Justin R.
Cast Irons for Future Diesel Engines
May, p 46-47

F
Ferguson, Dave/Notte, Michael A.
Computerizing Your Foundry: How Specialty Cast Metals Did It
Apr, p 55-57
Ford, Eric
Automating Britain's Foundries
Jun, p 46-48
From England: A Less Turbulent Approach to Casting Aluminum Alloys
Feb, p 46-47
Forsman, Eric
Computerizing Your Foundry: Conducting the Needs Analysis
Mar, p 38-39

G
Godsell, B. C.
Producing As-Cast Ductile Iron in Iron Permanent Molds
Jul, p 35-37
Gundlach, R./Janowak, J.
The Key to High Strength Gray Irons: Avoiding the Pitfalls
Oct, p 38

H
Hipple, William F.
Melting With a Medium Frequency Furnace
Aug, p 39-41

J
James Jr., Charles F./Sylvia, Gerin J.
The Robot's Role in Foundry Mechanization
May, p 30-33
Janowak, J./Gundlach, R.
The Key to High Strength Gray Irons: Avoiding the Pitfalls
Oct, p 38

K
Kanicki, D./Bailey, R.
Casting Increase Seen Late in '82
Jan, p 37
Kanicki, David P.
America, Inc
Nov, p 17
Beware: Behind-the-Scenes Bureaucrats
Aug, p 29
Can We Change Our Hard-Nosed Attitudes?
Oct, p 21
Can We Manage our Future?
Jul, p 25
Is That Really Where You Want Them?
Jan, p 18
Pessimists and Pioneers
May, p 29
A Question of Confidence
Nov, p 23
The Trouble(s) with R&D
Mar, p 33
Knight, Charles F.
Managing Opportunities in the 80's
Jul, p 26-31
Kramme, L. Wayne
Computerizing Your Foundry: What a Computer Can Mean to Your Foundry
Apr, p 54-55
Kunes, T. P./Radia, L. T./Zayko, R. E.
Integrating Health Hazard Controls With Plant and Process Engineering
Jun, p 43-45
Kunes, T. P./Smith, M. E./Stephens, W. A.
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
May, p 43-45
Kunes, T. P./Stephens, W. A./Nagle, D. L.
Managing Hazardous Wastes in the Foundry
Mar, p 40-42
Kunes, T. P./Stephens, W. A./Smith, M. E.
The Foundry Landfill
Apr, p 64-66
Kunes, Thomas P./Radia, Jitendra T.
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Feb, p 48-50
Kunes, Thomas P.
Environmental Management: A Critical Siting and Expansion Issue
Jul, p 38-39

L
Lee, Robert S.
Art Joins Industry at a Deere Foundry
Mar, p 47-49
Leliaert, R. M./Riordan, R.
High-Frequency, High-Energy System for Casting Core Removal
Jan, p 38-39

M
Mikelonis, Paul J.
Charge Makeup for Coreless Melting - Part 2
Nov, p 27-30
Charge Makeup for Coreless Melting
Oct, p 33-35
Mikelonis, Paul
The Basics of Heat Treating Castings
Sep, p 26-28
Miller, John E.
The Crisis of Strategic Metals "OPEC of the '80s"
Jan, p 52-56

N
Nagle, D. L./Kunes, T. P./Stephens, W. A.
Managing Hazardous Wastes in the Foundry
Mar, p 40-42
Naro, R./Dorfmueller, A./Sparks, J.
U.S. and Worldwide Foundry Trends
Feb, p 43-45
Notte, Michael A./Ferguson, Dave
Computerizing Your Foundry: How Specialty Cast Metals Did It
Apr, p 55-57

P
Price, Dr. P. E./Widmer, Dr. R.
Porous Castings? HIPping Might Be Your Answer
Aug, p 42-43
Pritchard, Ray
Heat Treating Steel Castings
Sep, p 28-29
Prucha, Thomas E.
Gating for the In-the-Mold Process
Feb, p 38-42

R
Radia, Jitendra T./Kunes, Thomas P.
The Environmental Audit: Combining Cost Control with Regulatory Compliance
Feb, p 48-50
Radia, L. T./Kunes, T. P./Zayko, R. E.
Integrating Health Hazard Controls With Plant and Process Engineering
Jun, p 43-45
Ricciuti, Robert A.
Recovery Expected for Ferrous Castings
Jan, p 33-34
Riordan, R./Leliaert, R. M.
High-Frequency, High-Energy System for Casting Core Removal
Jan, p 38-39

S
Schaum, Jack H.
The Business of Communicology
Feb, p 37
Foundry Maintenance Masters New Technologies
Aug, p 30-32
Miles to Go . . . And Promises to Keep
Sep, p 19
One Person Can Make a Difference
Apr, p 49
One World . . . Same Problems
Jun, p 33
Sheppard Foundry Prefers CG Iron
Jun, p 34-36
Schulze, W. E.
Sand Reclamation: An Equipment Update - Blast Cleaning and Centrifugal Type Reclamation
May, p 38-40
Shaw, D. E. "Doc"/Clement, Robert "Scotty"
A New Approach to Cupola Baghouse Design
Nov, p 36-38
Sheehan, C. T.
COLA's Concessions Major '82 Labor Issues
Jan, p 36-37
Smith, M. E./Kunes, T. P./Stephens, W. A.
The Foundry Landfill
Apr, p 64-66
Smith, M. E./Stephens, W. A./Kunes, T. P.
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
May, p 43-45
Sparks, J./Dorfmueller, A./Naro, R.
U.S. and Worldwide Foundry Trends
Feb, p 43-45
Stephens, W. A./Kunes, T. P./Nagle, D. L.
Managing Hazardous Wastes in the Foundry
Mar, p 40-42
Stephens, W. A./Kunes, T. P./Smith, M. E.
The Foundry Landfill
Apr, p 64-66
Stephens, W. A./Smith, M. E./Kunes, T. P.
Making Your Foundry's Waste Work for You: Constructive Use and Reclamation
May, p 43-45
Sylvia, Gerin J./James Jr., Charles F.
The Robot's Role in Foundry Mechanization
May, p 30-33

T
Teetor III, Ralph J.
Quality: How Much Does It Really Cost?
Jul, p 40-43

Thrun, Walter J.
Computerization Enters the Manufacturing Arena at J. I. Case Pryor Foundry
Nov, p 24-26

Timberlake, Roger D.
Refractory Considerations for Channel Furnaces Processing Irons - Part II
Jan, p 41-45
Traenkner, Fred O.
A Checklist for the Mechanical Properties of Aluminum Castings
Oct, p 36-37
Moisture in Ingots: Aluminum's Enemy Within
Sep, p 32-33
Titanium: An Alternative to Graphite Tubes for Fluxing Aluminum
Nov, p 34-35

V
Veale, T.
From Japan: A High Efficiency Aluminum Melting Furnace
Apr, p 62-63
Vingas, George
Should You be Using a Zircon Water Base Coating?
Mar, p 43-46

W
Wagner Jr., John A.
Wagner Castings: A View of Industrial Engineering
Mar, p 50-52
Wasem, J. W.
Sand Reclamation: An Equipment Update - Wet Reclamation
May, p 41-42
Westman, Robert A.
Inred: A New Source of Iron for the Foundry?
Sep, p 38-39
Westover, J. A.
Industrial Engineering in the Foundry: An Introduction
Dec, p 27
Widmer, Dr. R./ Price, Dr. P. E.
Porous Castings? HIPping Might Be Your Answer
Aug, p 42-43

Z
Zayko, R. E./Radia, L. T./Kunes, T. P.
Integrating Health Hazard Controls With Plant and Process Engineering
Jun, p 43-45